ABSTRACT

The present invention contemplates an apparatus and a method for limiting the number of specified messages placed onto a network thus to improve network performance. An element management system, upon detecting that a defined threshold has been exceeded for specified types of messages, determines which network element is generating the greatest number of such messages. Thereafter, the element management system instructs the network element that is generating the largest number of alarm messages to cease transmitting a specified type of alarm message. In an alternate embodiment of the invention, if the event flow rate is still too high, the element management system may instruct the cross connect network element to stop sending all threshold types of alarms. Finally, if the event flow rate is still too high, the element management system may cause all QoS alarms from the one network element to not be transmitted. Alternatively, the threshold alarms from other network elements may be muted for a period to reduce the overall event flow rate. For each embodiment, the element management system suspends the flow of messages for a defined period of time. For example, in one preferred embodiment, the select type of QoS signal is muted for a period of 600 seconds. In an alternate embodiment of the invention, a network element is allowed to start transmitting the suspended QoS signals if the overall alarm rate for the suspended QoS signals falls below a lower threshold value.